

Application No.: 10/016,042
Amendment Dated: 19 September 2003
Submittal of Preliminary Amendment

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the Application:

Listing of Claims:

1. (Currently amended) An apparatus for protection of an electronic circuit against anomalies in a supplied power voltage, said apparatus comprising:

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a reserve power source connected to the supplied power voltage, said reserve power source for providing ~~an apparatus~~ a module voltage to ~~said apparatus~~ the electronic circuit and further for maintaining said ~~apparatus~~ module voltage for a predetermined amount of time after an anomaly has occurred in the supplied power voltage;

a module control for maintaining selected data and control signals transmitted to the electronic circuit during occurrence of said anomaly in the supplied power voltage; and

a differential comparator connected to the supplied power voltage and to said reserve power source such that said differential comparator produces a comparator control signal upon occurrence of said anomaly in the supplied power voltage, said differential comparator further connected to said module control for providing said comparator control signal to said module control.

2. (Currently amended) The apparatus of ~~claim 2~~ claim 1 wherein said differential comparator comprises a capacitance for maintaining ~~for said apparatus~~ said module voltage in said differential comparator ~~for a~~ for said predetermined amount of time after said anomaly has occurred in the supplied power voltage.

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3. (New) The apparatus of claim 1 wherein said reserve power source comprises at least one of a battery, a capacitance, and an inductance for maintaining said module voltage for said predetermined amount of time after said anomaly has occurred in the supplied power voltage.
4. (New) The apparatus of claim 3 wherein said reserve power source further comprises at least one of a diode switch or a transistor switch adapted to prevent discharging of said module voltage if the supplied power voltage decreases.
5. (New) The apparatus of claim 1 wherein said differential comparator comprises a comparator for receiving both said module voltage and the supplied power voltage, said comparator further producing said comparator control signal after said anomaly has occurred in the supplied power voltage.
6. (New) The apparatus of claim 5 wherein said comparator forces a backup operation and triggers a protected operation when the supplied power voltage drops below said module voltage.
7. (New) The apparatus of claim 5 wherein said differential comparator further comprises a Schottky diode disposed between the supplied power voltage source and said module voltage source.
8. (New) The apparatus of claim 1 wherein said predetermined amount of time is about 5 to 500 μ sec.

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9. (New) The apparatus of claim 1 further comprising at least one power conditioner disposed between the supplied power voltage source and said differential comparator.

10. (New) The apparatus of claim 1 wherein said module control functions to hold an external reset signal in an inactive state in response to said occurrence of said anomaly in the supplied power voltage.

11. (New) A method for protecting an electronic circuit against anomalies in a supplied power voltage, said method comprising the steps of:

 connecting a reserve power source to the supplied power voltage, said reserve power source for providing an apparatus voltage to the electronic circuit and for maintaining said apparatus voltage for a predetermined amount of time after an anomaly has occurred in the supplied power voltage;

connecting a differential comparator to the supplied power voltage and to said reserve power source such that said differential comparator produces a comparator control signal upon occurrence of said anomaly in the supplied power voltage; and

providing said comparator control signal to a module control for controlling the electronic circuit.

12. (New) The method of claim 11 further comprising the step of maintaining, via said module control, selected data and control signals transmitted to the electronic circuit during occurrence of said anomaly in the supplied power voltage.

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13. (New) The method of claim 11 further comprising the step of providing a capacitance in said differential comparator, said capacitance for maintaining said module voltage in said differential comparator for said predetermined amount of time after said anomaly has occurred in the supplied power voltage.

14. (New) The method of claim 11 further comprising the step of providing at least one of a battery, a capacitance, and an inductance in said reserve power source, for maintaining said module voltage in said reserve power source for said predetermined amount of time after said anomaly has occurred in the supplied power voltage.

15. (New) The method of claim 14 further comprising the step of providing an electronic switch in said reserve power source.

16. (New) The method of claim 15 further comprising the step of activating said switch if the supplied power voltage decreases, said switch activation functioning to prevent discharging of said module voltage from said reserve power source.

17. (New) The method of claim 11 further comprising the step of filtering at least one of the supplied power voltage and said module voltage.


18. (New) The method of claim 11 further comprising the step of detecting said anomaly when the supplied power voltage drops below said module voltage.

19. (New) The method of claim 11 wherein said predetermined amount of time is about 5 to 500 μ sec.

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 20. (New) The method of claim 11 further comprising the step of holding a reset signal in an inactive state for at least said predetermined amount of time after said anomaly has occurred in the supplied power voltage, said reset signal adapted for transmittal to the electronic circuit.
